APPENDIX

A. Design Guidelines

- I. Purpose and ApplicabilityII. Building Design Guidelines
- III. Bicycle Parking Design GuidelinesIV. Landscape Design Guidelines
- V. Access and Circulation Design Guidelines
- VI. Security Gates Design Guidelines
- B. 2' Plant List
- C. 3' Plant List
- D. Art in Private Development
- E. Photometric Plan
- F. Shared Parking Model
- G. Consanguinity Chart
- H. Fee Schedule
- I. Zoning Administrator Opinions
- J. Disposition Table
- K. Ordinance No. 2003.36
- L. References

APPENDIX A. DESIGN GUIDELINES

A-I. Purpose and Applicability.

- **A. Purpose.** The design guidelines are discretionary criteria which are used in the City's review of project proposals. They are intended to encourage high quality building and site design that complements the architecture, landscapes, history, and culture of Tempe and ensures the functionality of the built environment.
- **B.** Applicability. The design guidelines are to be applied by the City during project reviews. Applicants are responsible for addressing the guidelines in their project proposals, and the City, through its applicable decision making bodies (Part 6 of this Code) may require modifications to designs to be consistent with the design guidelines. Where an existing building or site that is being added onto or remodeled does not meet a design guideline, the addition or remodel should bring the subject building or site into closer conformance with the guideline, to the extent practicable given the nature and extent of the alteration.

A-II. Building Design Guidelines.

- A. Contextual Design Guideline. Building elevations and materials should have design characteristics that are contextually appropriate. Contextual relationships are determined through design review and consider: massing, rhythm, scale, height, roof form, fenestration (windows and doors), articulation/relief, materials, detailing, lighting, signs, and other features of existing on the site, if any, and adjacent buildings. Where contrasting design elements are provided, the applicant must demonstrate how the alternate design is equal or superior to the existing and/or adjacent building design in terms of compatibility.
 - 1. New Design Character. A building design that varies from the contextual design guideline in establishing a new character, may be approved only after demonstrating that the proposed design is consistent with the development plan approval criteria in Section 6-307 and it provides exceptional or unique benefits to the neighborhood or community, which may include but are not limited to the following values:
 - a. Energy conservation through a certified "green building" or "sustainable development" project;
 - b. Historic preservation; and
 - c. Affordable housing.

- **B.** Accessibility. Buildings should be accessible for every person, consistent with the Americans with Disability Act (ADA) and its implementing standards and guidelines. The Americans with Disabilities Act (ADA) is a federal law that was enacted in 1990 for the purpose of ensuring that all Americans have the same basic rights of access to services and facilities. The ADA prohibits discrimination on the basis of disabilities. To effect this prohibition, the statute required certain designated federal agencies to develop implementing regulations, known as the ADA Accessibility Guidelines (ADAAG). The guidelines and standards contained within the ADAAG are continually being updated and refined, and current versions should be reviewed as part of the design process for every project.
- C. Crime Prevention Through Environmental Design (CPTED). Safe environments and pedestrian activity are interrelated and one cannot exist without the other. Therefore building designs should support pedestrian activity and provide natural surveillance of spaces from key locations inside and next to buildings. This should be accomplished through the appropriate design and placement of windows, entrances, pedestrian amenities, lighting, outdoor rooms (e.g., balconies, arcades, and similar features), and activity support. Buildings should incorporate entrances, windows, balconies, and activities allowing visibility of the street, parking areas, and entrances from inside buildings; and visibility of building entrances and other public gathering spaces from the street, as generally shown below. Lighting must conform to the provisions of Part 4, Chapter 8.

The CPTED principles are:

1. Natural Surveillance

Natural surveillance is the CPTED concept that encourages an open design. It promotes opportunities for people, as they are engaged in their normal behaviors, to observe the space around them.

This principle allows people to feel comfortable as they use a space, maintain distance from intruders that may be in or near the space, and encourage observation of those individuals that may be using the space with criminal intent.

Natural Surveillance encourages the design and placement of physical features so as to maximize visibility. This includes building orientation, placement of windows, building and site entrance and exit locations, refuse containers, landscape materials, parking lots, walkways, walls and fences (including the use of wrought iron and similar materials that promote visibility), signage, and other physical obstructions. It may also include the placement of persons or activities to maximize surveillance possibilities.

Minimally maintained lighting standards that provide for nighttime illumination of parking lots, walkways, entrances, exits and related areas, to promote a safe environment, are also Natural Surveillance components of good CPTED design.

2. Access Control

Access control is the CPTED principle directed at decreasing criminal accessibility. This principle is especially important where intruders will not be easily observed. Fences, walls, and actual building location on a site are primary considerations to access control.

However, provisions of access control must encourage the use of natural surveillance, where practical, to restrict criminal intrusion into an area.

Intruders are more readily recognized through the proper location and use sidewalks, pavement variations, gates, lighting, signage, fencing, landscape and other techniques used to clearly guide the public to and from activity areas and are primary to effective access control.

3. Activity Support

Activity support involves the placement on activities where the individuals engaged in those activities become part of the natural surveillance and access control systems. Examples include:

Placement of safe activities in areas so as to discourage would be offenders. The goal is to increase the likelihood of good natural surveillance and the perception of safety for normal users, and the perception of risk for the offenders.

Placement of high-risk activities in safer locations to overcome the vulnerability associated with these activities through the use of good natural surveillance and access control techniques.

The location of gathering areas in places that provides good natural surveillance and access control.

4. Territoriality

Territoriality is the CPTED principle that is used to clearly delineate private space from semi-private and public spaces. Properly used it creates a sense of ownership in private and semi-private areas.

Territoriality creates an environment where strangers and intruders stand out and are more easily identified. This is accomplished through the effective use of signage, grade changes, fencing, landscape edging, lighting, and any number of imaginative techniques that encourage individuals to take pride in their surroundings and report criminal activity.

5. Maintenance

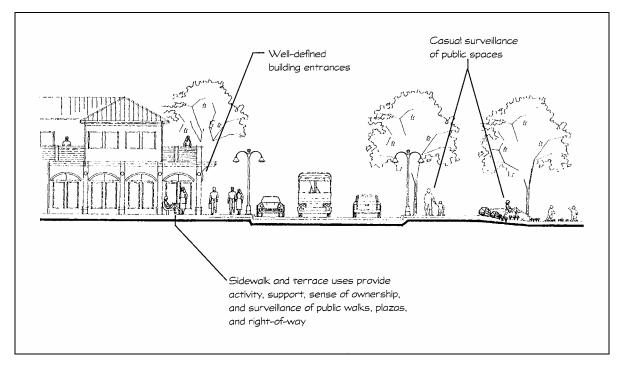
Proper maintenance of landscape, lighting, addressing, and other features can facilitate the principles of CPTED. It is clear that Access Control, Natural Surveillance, and Territoriality all have a maintenance component. Examples:

Proper maintenance of security lighting to insure that lamps are working properly and the required minimum lighting level are being maintained.

Landscape which is maintained to prescribe standards so as to minimize conflicts between natural surveillance opportunities and landscape at maturity.

The recognition of these principles should help guide owners, architects, planners, and developers of property to design built environments that accomplish the goals of the police department's crime prevention goals.





- **D. Outdoor Living Area.** Required outdoor living areas (per Part 3 and 5) should conform to the following standards:
 - 1. At least fifty percent (50%) of all required areas should be in private outdoor spaces, such as patios, porches, balconies, rooftop gardens, and/or other areas designed for the exclusive use of individual dwelling units;
 - 2. Designated private outdoor living spaces should have dimensions that are not less than six (6) feet in width and six (6) feet in depth, and eight (8) feet in height;
 - 3. Areas not designed for the exclusive use of individual dwellings under subsection 1, above, should be designated common areas for all residents of a development. Common areas may include but are not limited to: patios, porches, balconies, rooftop gardens, recreation areas, open space, etc; and
 - 4. Designated common outdoor living spaces should have dimensions that are not less than fifteen (15) feet in width and fifteen (15) feet in depth, eight (8) feet in height, and five hundred (500) square feet in area per space.

A-III. Bicycle Parking Design Guidelines.

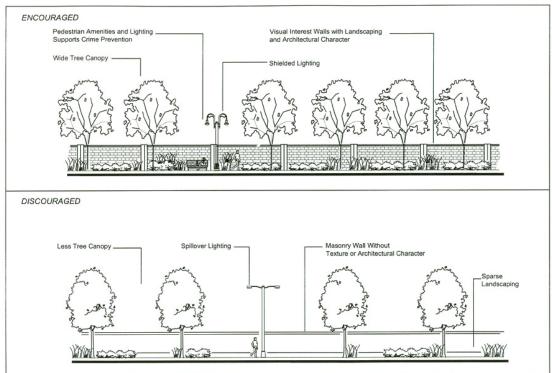
A. Bicycle Parking Location and Design.

- All parking spaces for bicycles should be equipped with a security rack that is designed and installed in conformance with the Pedestrian and Bicycle Facility Design Guidelines, contained in the Comprehensive Transportation Plan. Bicycle racks other than the standard detail may be approved, subject to design review and approval by the Public Works Manager;
- 2. Areas set aside for bicycle parking should be clearly marked and reserved for bicycle parking only;
- 3. Bicycle parking should not impede or create a hazard to pedestrians. Parking areas should located so as to not conflict with vision clearance standards;
- 4. Bicycle parking should be conveniently located with respect to both the street right-of-way and at least one building entrance (e.g., no farther away than the closest parking space). It should be incorporated whenever possible into building design and coordinated with the design of street furniture (e.g., benches, street lights, planters and other pedestrian amenities) when street furniture is provided;
- 5. Bicycle racks should be installed near main building entrances and located in areas with shade. A pedestrian pathway linking the bicycle parking area to the public sidewalk and the primary building entrance(s) should be provided;
- 6. Site design for bicycle parking should conform to the Pedestrian and Bicycle Facility Design Guidelines contained in the Comprehensive Transportation Plan;
- 7. Bicycle parking should be visible to cyclists from street sidewalks or building entrances, to aid in security from theft and damage; and
- 8. Bicycle parking should be least as well lit as vehicle parking for security.
- **B.** Options for Storage. Bicycle parking requirements for long-term and employee parking can be met by providing a bicycle storage room, bicycle lockers, racks, or other secure storage space inside or outside of the building.

A-IV. Landscape Design Guidelines.

- **A. General Landscape Guidelines.** Landscape plans should demonstrate that developments satisfy the following guidelines, as applicable, and as generally shown in the figures below:
 - 1. Provide visual screening, privacy and natural surveillance, where needed.
 - 2. Retain natural vegetation and incorporate it into the landscape design, as practicable;
 - 3. Define pedestrian pathways and open space areas with landscape materials where appropriate;
 - 4. Provide focal points within a development, such as specimen trees, hedges, flowering plants, art and pedestrian amenities;
 - 5. Use a combination of plants for year-long color and interest; and
 - 6. Use landscape treatments to enhance the screening of outdoor storage and mechanical equipment areas, and enhance graded areas such as earth berms, swales and retention ponds.





SCREEN WALL TYPES Option 1: Masonry Wall (stucco, stone or similar quality material) Single Family District Other District: Screen Walls Option 1 or 3 Acceptable Option 2: See Through Wall (wrought iron or similar quality material) Single Family District Option 2 or 3 Preferred Option 1 may be required to screen parking areas Option 3: Living Wall (materials subject to design review) Single Family District Tree Canopy 80-90% at Maturity Except for Lights 0 00 0 00

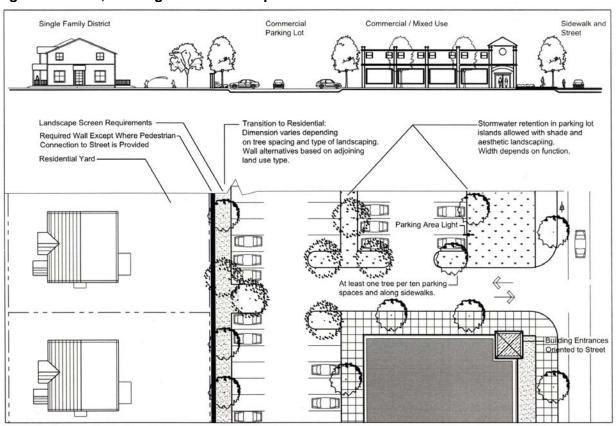
Screen wall heights vary 3' -8' based on function.

Other options may be approved through design review

Figure A-IV A.2, General Landscape Guidelines (continued)

Figure A-IV A.3, Parking Area Landscape Guidelines

No Wall Required Where parking is proposed or height difference exceeds 5 feet, screening walls shall be subject to design reveiw.



- **B.** Tree Selection Guidelines. Tree species should be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. Consideration should be given to:
 - 1. Provide a broad canopy where shade or screening of tall objects is desired;
 - Use low-growing trees for spaces under utility wires;
 - 3. Select trees from which lower branches can be trimmed in order to maintain a healthy growth habit where vision clearance and natural surveillance is a concern;
 - 4. Use narrow or columnar trees where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street for natural surveillance; and
 - 5. Street trees should be planted within existing and proposed planting strips, and in sidewalk tree wells on streets without planting strips. Tree placement should provide canopy cover (shade) and avoid conflicts with existing trees, retaining walls, utilities, lighting, and other obstacles.
- **C. Screening Guidelines.** The design of screening devices should consider the following guidelines:
 - 1. Site conditions and adjacent uses should be considered when designing visual screening;
 - 2. Provide shade over walkways, if appropriate;
 - 3. Natural surveillance, access control, and privacy needs should be considered; and
 - 4. General consistency with the guidelines in Figures A-IVA1 and A-IVA2, above.
- **D. Wall Design.** All required walls shall be located and designed based on the intended screening function, proposed use, and adjoining uses, as follows:
 - 1. Walls placed between a residential district and any commercial use, industrial uses, or surface parking lot exceeding ten thousand (10,000) square feet shall be constructed of masonry, concrete, ornamental iron, or equal or better quality material, as approved through design review;
 - 2. All masonry walls shall have an architectural texture, color and material compatible with the primary building on site (or on respective sides). Walls may have ornamental decorative iron fence panels, vertical pickets with spacing that is consistent with the Uniform Building Code, as an integral part of the design of the wall; and

- 3. A living wall or see through ornamental iron fence may be approved as a substitute for masonry if the wall is not required for visual screening of mechanical equipment, outdoor storage areas, or parking areas.
- E. 2' Plant List. See Appendix B.
- F. 3' Plant List. See Appendix C.

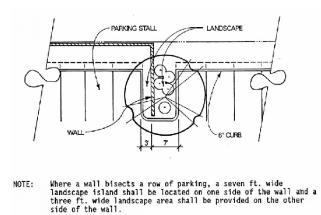
A-V. Access and Circulation Design Guidelines.

- **A. Shared Driveways.** The number of driveway and private street intersections with public streets should be minimized through the use of shared driveways with adjoining uses where feasible. The City may require the use of shared driveways through the land use and development review process, for traffic safety and access management purposes in accordance with the following standards:
 - 1. Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, the City may require that they be stubbed to adjacent developable parcels for future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development due to infill or redevelopment potential.
 - 2. Access easements (i.e., for the benefit of affected properties) should be a condition of land use or development approval and should be recorded for all shared driveways prior to occupancy.
 - 3. Exception. Shared driveways are not required when existing development patterns or physical constraints (e.g., topography, parcel configuration, and similar conditions) prevent extending the street/driveway with reciprocal access in the future.
- **B.** On-Site Traffic Calming. Traffic calming features such as curb extensions, special paving, humps or other features may be required for the on-site circulation systems and street access points of larger developments. Traffic calming measures should conform to the Pedestrian and Bicycle Facility Design Guidelines, contained in the Comprehensive Transportation Plan.

A-VI. Security Gates Design Guidelines.

The following process and design criteria are for gates that are to be used for access control to a commercial, industrial or residential site:

- A. Process. Two copies (24"x36") of an overall site plan of the property and an enlarged detailed site plan (scale: 1" = 20'-0") of the area in which the gate(s) will be located must be submitted for Preliminary Site Plan Review for initial city review. Details of the gates must also be submitted. Final approval must be obtained from Design Review for the site plan with access control gates. Contact the Development Services Department (Planning Staff) at 480-350-8331 for questions regarding this process, submittal requirements and fees.
 - 1. Any fence, gate or wall over six (6) feet in height or any self-operating or electronically controlled gate will require a permit to be obtained prior to installation. Please contact the Building Safety Division at 480-350-8341 for permit submittal requirements and fees.
 - 2. All gates require Fire Department approval prior to installation. A plan check/inspection fee will be charged per gate.
- **B. Design Criteria.** Please indicate, on the site plan, the required number of parking spaces and the number of parking spaces provided for the entire development. The Zoning and Development Code does not allow walls, gates or fences to occupy any required parking spaces. If a wall, fence or gate bisects a parking space, it must be surrounded by a landscaped island that conforms to the sketch below.



- 1. Please refer to the Zoning and Development Code for additional requirements affecting parking lot layout, lighting, fence and wall locations, and construction materials for walls.
- All walls and gates that are visible from the street must be designed utilizing ornamental iron (no chain link, razor ribbon or barbed wire). Walls or fences shall be designed and finished to relate to other site walls or the main buildings on site.

- 3. Pedestrian ingress/egress shall be maintained and meet the requirements of ADA and the Building Code.
- 4. For developments located on arterial or collector streets, the Transportation Division of the Public Works Department requires that an eighty (80) feet stacking distance be provided between the public sidewalk and the proposed gate or key box, whichever is closer. A by-pass lane or turn around area must be provided on-site (without requiring a car to back into entering traffic) for vehicles which are not allowed to enter the site. Developments located on streets of other classification will be analyzed on a case-by-case basis.
- 5. The main gate shall have an emergency vehicle strobe detector. Knox key switch shall be installed at all gates unless noted by Fire Department. Knox box may be required upon Fire review. Battery backup shall be provided on gate systems unless the gate "fails" in the open position upon loss of power. Fire Prevention requires all gates to have a minimum drive-thru width of twenty (20) feet.
- 6. Residential developments such as apartments, condominiums, townhomes, or single family, must provide electronic keypad for Police Department access through gates.
- 7. When a commercial, industrial or residential development utilizes city refuse collection services, the Refuse Division of the Public Works Department requires that any gates are to be kept open from 6:00 a.m. to 4:30 p.m. on refuse collection days, unless specific arrangements have been made with the Refuse Division. The property owner or their representative is responsible for opening and closing all gates.